PATENT

Serial No.: 10/648,388

Docket No.: 01743-224

## **IN THE CLAIMS:**

Amend the following claims:

(Currently amended) A method of scanning a sample with a scanning electron microscope
having an object lens for focusing an electron beam, and a holder, on which said sample is
disposed, to be supplied a voltage forming an electric field on the sample, said method
comprising:

irradiating said electron beam on a surface of said sample,

forming said electric field on said sample between said object lens and said holder by controlling a negative voltage applied to said holder so as to change an acceleration voltage of said electron beam in order to promote said surface on said sample to be charged,

subsequently adjusting said irradiating said electron beam on said surface of said sample which is promoted to be charged by controlling said negative voltage to change said acceleration voltage such that secondary electron generation efficiency of secondary electrons generated from said sample by irradiating said electron beam on said sample becomes close to 1.0 in comparison with conditions used when promoting said sample to be charged, in order to observe said sample.

2. (Previously Presented) A method of scanning a sample with a scanning electron microscope as defined in claim 1, wherein

a positive or negative voltage is added to an electrode at said object lens so as to promote said sample to be charged.

3. (Currently amended) A scanning electron microscope comprising:

an electron source for generating an electron beam,

an acceleration voltage supply for accelerating said electron beam generated from said electron source,

a scanning deflector for scanning said electron beam so as to be irradiated on a surface of a sample,

an object lens for focusing said electron beam, and

Serial No.: 10/648,388

Docket No.: 01743-224

a holder on which said sample is disposed to be supplied a voltage forming an electric field on said sample, said scanning electron microscope further comprising:

a controller for controlling said electron beam by:

- (a) forming said electric field on said sample between said object lens and said holder by controlling a negative voltage applied to said holder; such that it promotes charging of said surface of said sample, and
- (b) subsequently adjusting the irradiating of said electron beam on said surface of said sample which is promoted to be charged by controlling said negative voltage to change said acceleration voltage such that secondary electron generation efficiency of secondary electrons generated from said sample by irradiating said electron beam on said sample becomes close to 1.0 in comparison with conditions used when promoting said sample to be charged, in order to observe said sample.